

REMARKS

Claims 11, 14, 17, 19-55, 57-59, 62, 65-71, 75-79 and 81-101 are pending in the application. Claims 11, 14, 17, 19-21, 65-71, 75-79, and 81-83 are allowed. Claim 33 is objected to under 37 C.F.R. § 1.75(c) as being of improper dependent form for failing to limit the subject matter of a previous claim. Claims 22-49, 51-55, 57-59, and 62 are rejected under 35 U.S.C. § 102(a) as being anticipated by Gonsalves et al. ("High Resolution Resists for Next Generation Lithography: The Nanocomposite Approach", Materials Research Society Symposium Proceedings (2001), vol. 636, pg. D6.5.1-D.6.5.12) (hereinafter "Gonsalves"). Claims 38-40, 42, 47, 51, 52, 55, and 57 are rejected under 35 U.S.C. § 102(b) as being anticipated by United States Patent No. 5,945,250 to Aoai et al. (hereinafter "Aoai"). Claims 38-40, 42, 51, 52, and 55 are rejected under 35 U.S.C. § 102(b) as being anticipated by Aogo et al. (JP 10-221852) (hereinafter "Aogo"). Claim 50 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Gonsalves in view of United States Patent No. 6,492,086 to Barclay (hereinafter "Barclay"). Claims 53 and 54 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Aoai in view of Barclay. Claims 53 and 54 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Aogo in view of Barclay. Claims 38, 39, 42, 43, 51, 52, 55, and 62 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 6, 10, 11, and 17 of copending Application No. 10/835,757. Claims 22-25, 29-33, 35-46, 49-55, 58, 59, and 62 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 3, 5, 6, 8, 10-13, 18-20, 22, and 23 of copending Application No. 10/324,642.

Applicant has amended claim 38. Support for the amendment to claim 38 can be found in the specification on page 19, line 3 through page 20, line 17, among other places. Applicant has additionally added new claims 84-101. Support for the newly added claims can be found in the specification on page 19, line 3 through page 23, line 4. Applicant has cancelled claims 33 and 43 without prejudice to introduction in a subsequent application.

Claim 33 and 37 C.F.R. § 1.75(c)

Claim 33 is objected to under 37 C.F.R. § 1.75(c) as being of improper dependent form for failing to limit the subject matter of the previous claim. Applicant has cancelled claim 33 without prejudice to introduction in a subsequent application. The cancellation of claim 33 renders the Examiner's objection moot, and Applicant respectfully requests that the present objection be withdrawn.

Claims 22-49, 51-55, 57-59, and 62 and 35 U.S.C. § 102(a)

Claims 22-49, 51-55, 57-59, and 62 are rejected under 35 U.S.C. § 102(a) as being anticipated by Gonsalves et al. Applicant has submitted herewith an Affidavit Pursuant to 37 C.F.R. § 1.132 declaring that the reference Gonsalves et al. ("High Resolution Resists for Next Generation Lithography: The Nanocomposite Approach", Materials Research Symposium Proceedings (2001), vol. 636, pg. D6.5.1 – D6.5.12) is and describes Applicant's own work. An Applicant's disclosure of his or her own work within the year before the application filing date cannot be used against him or her under 35 U.S.C. § 102(a). *In re Katz*, 687 F.2d 415, 215 USPQ 14 (CCPA 1982). As a result, Applicant respectfully requests that the rejection of claims 22-49, 51-55, 57-59, and 62 as being anticipated by Gonsalves under 35 U.S.C. § 102(a) be withdrawn.

Claims 38-40, 42, 47, 51, 52, 55, and 57 and 35 U.S.C. § 102(b)

Claims 38-40, 42, 47, 51, 52, 55, and 57 are rejected under 35 U.S.C. § 102(b) as being anticipate by Aoai. Applicant respectfully asserts that Aoai does not teach or describe a polymeric chemically amplified resist consistent with that recited in claim 38. As a result, Applicant respectfully asserts that claim 38 is not anticipated by Aoai under 35 U.S.C. § 102(a). As claims 39, 40, 42, 47, 51, 52, 55, and 57 depend from and further limit claim 38, Applicant respectfully asserts that claims 39, 40, 42, 47, 51, 52, 55, and 57

are also not anticipated by Aoi and respectfully requests that the rejection of these claims be withdrawn as well.

Claims 38-40, 42, 51, 52, and 55 and 35 U.S.C. § 102(b)

Claims 38-40, 42, 51, 52, and 55 are rejected under 35 U.S.C. § 102(b) as being anticipated by Aogo. Applicant respectfully asserts that Aogo does not teach or describe a polymeric chemically amplified resist consistent with that recited in claim 38. As a result, Applicant respectfully asserts that claim 38 is not anticipated by Aogo under 35 U.S.C. § 102(a). As claims 38-40, 42, 51, 52, and 55 depend from and further limit claim 38, Applicant respectfully asserts that claims 38-40, 42, 51, 52, and 55 are also not anticipated by Aogo and respectfully requests that the rejection of these claims be withdrawn as well.

Claim 50 and 35 U.S.C. § 103(a)

Claim 50 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Gonsalves in view of Barclay. As previously discussed, Applicant has submitted an Affidavit Pursuant to 37 C.F.R. § 1.132 declaring that Gonsalves et al. ("High Resolution Resists for Next Generation Lithography: The Nanocomposite Approach", Materials Research Symposium Proceedings (2001), vol. 636, pg. D6.5.1 – D6.5.12) is and describes Applicant's own work. As a result, Gonsalves is an improper reference upon which to base an obviousness rejection under 35 U.S.C. § 103(a).

Moreover, Barclay alone does not render claim 50 obvious. Barclay does not teach or suggest a chemically amplified resist comprising a polymerizable photoacid generating component nor a polyhedral oligosilsesquioxane component. *See In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974) (to establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art). As a result, Applicant respectfully asserts that claim 50 is patentable over Gonsalves in view of Barclay and respectfully requests that the Examiner withdraw the present rejection.

Claims 53 and 54 and 35 U.S.C. § 103(a)

Claims 53 and 54 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Aoai in view of Barclay. Applicant respectfully asserts the combination of Aoai and Barclay does not teach or suggest all the limitations of claim 53.¹ The combination of Aoai and Barclay does not teach or suggest a lithographic process comprising an polymeric chemically amplified resist comprising a polymerizable photoacid generating component comprising $[p\text{-CH}_2=\text{C}(\text{CH}_3)\text{C}(\text{O})\text{OC}_6\text{H}_4\text{SMe}_2]\text{OSO}_2\text{CF}_3$. As a result, Applicant respectfully asserts that claim 53 is patentable over Aoai in view of Barclay and respectfully requests that the Examiner withdraw the present rejection. As claim 54 depends from and further limits claim 53, Applicant respectfully asserts that claim 54 is also patentable over Aoai in view of Barclay and respectfully requests that the Examiner withdraw the rejection of claim 54 as well.

Claims 53 and 54 and 35 U.S.C. § 103(a)

Claims 53 and 54 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Aogo in view of Barclay. Applicant respectfully asserts the combination of Aogo and Barclay do not teach or suggest all the limitations of claim 53.² The combination of Aoai and Barclay do not teach or suggest a lithographic process comprising an polymeric chemically amplified resist comprising a polymerizable photoacid generating component comprising $[p\text{-CH}_2=\text{C}(\text{CH}_3)\text{C}(\text{O})\text{OC}_6\text{H}_4\text{SMe}_2]\text{OSO}_2\text{CF}_3$. As a result, Applicant respectfully asserts that claim 53 is patentable over Aogo in view of Barclay and respectfully requests that the Examiner withdraw the present rejection. As claim 54 depends from and further limits claim 53, Applicant respectfully asserts that claim 54 is also patentable over Aogo in view of Barclay and respectfully requests that the Examiner withdraw the rejection of claim 54 as well.

¹ *In re Royka, supra.*

² *In re Royka, supra.*

Claims 38, 39, 42, 43, 51, 52, 55, and 62 and Double Patenting

The provisional rejection of claims 38, 39, 42, 43, 51, 52, 55, and 62 under the judicially created doctrine of obviousness-type patenting as being unpatentable over claims 1, 6, 10, 11, and 17 of copending Application No. 10/835,757 is respectfully traversed.

The Office Action states that the present rejection is a provisional rejection since the assertedly conflicting claims have not in fact been patented.³ Applicant respectfully acknowledges the provisional rejection of claims 38, 39, 42, 43, 51, 52, 55, and 62 over claims 1, 6, 10, 11, and 17 of copending Application No. 10/835,757. Claims 1, 6, 10, 11, and 17 of copending Application No. 10/835,757 may be amended during pendency of that application. If claims 1, 6, 10, 11, and 17 of copending Application No. 10/835,757 issue in a patent that would, in the opinion of the Examiner, sustain such an obviousness-type double patenting rejection, Applicant will respond to such a rejection when it is made.

For the foregoing reasons, Applicant respectfully requests that the provisional obviousness-type double patenting rejection of claims 38, 39, 42, 43, 51, 52, 55, and 62 over claims 1, 6, 10, and 11 of copending Application No. 10/835,757 be withdrawn.

Claims 22-25, 29-33, 35-46, 49-55, 58, 59, and 62 and Double Patenting

The provisional rejection of claims 22-25, 29-33, 35-46, 49-55, 58, 59, and 62 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 3, 5, 6, 8, 10-13, 18-20, 22, and 23 of copending Application No. 10/324,642 is respectfully traversed.

The Office Action states that the present rejection is a provisional rejection since the assertedly conflicting claims have not in fact been patented.⁴ Applicant respectfully acknowledges the provisional rejection of claims 22-25, 29-33, 35-46, 49-55, 58, 59, and

³ Office Action Mailed March 24, 2005, page 11.

⁴ *Id.* at page 12

62 over claims 1, 3, 5, 6, 8, 10-13, 18-20, 22, and 23 of copending Application No. 10/324,642. Claims 1, 3, 5, 6, 8, 10-13, 18-22, and 23 of copending Application No. 10/324,642 may be amended during pendency of that application. If claims 1, 3, 5, 6, 8, 10-13, 18-20, 22, and 23 issue in a patent that would, in the opinion of the Examiner, sustain such an obviousness-type double patenting rejection, Applicant will respond to such a rejection when it is made.


For the foregoing reasons, Applicant respectfully requests that the provisional obviousness-type double patenting rejection of claims 22-25, 29-33, 35-46, 49-55, 58, 59, and 62 over claims 1, 3, 5, 6, 8, 10-13, 18-22, and 23 of copending Application No. 10/324,642 be withdrawn.

CONCLUSION

In view of the foregoing Remarks, an allowance of the claims is respectfully solicited. The Examiner is respectfully invited to contact J. Clinton Wimbish at 336.607.7399 to discuss any matter related to this application.

Respectfully submitted,

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Date


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